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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/821,370	03/29/2001	Todd P. Beach	TMADE.067A	3442

7590 02/10/2004

Sheppard Mullin Richter & Hampton LLP
333 South Hope Street
48th Floor
Los Angeles, CA 90071

EXAMINER	
PASSANITI, SEBASTIANO	
ART UNIT	**PAPER NUMBER**
3711	

DATE MAILED: 02/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/821,370	Applicant(s) BEACH ET AL.	
	Examiner Sebastiano Passaniti	Art Unit 3711	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *02 December 2003*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-29* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-29* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

This Office action is responsive to communication received 12/02/2003 – Request for Two Month Extension of Time, Amendment B and Declaration.

Claims 1-29 remain pending.

Following is an action on the MERITS:

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-25 and 29 STAND rejected under 35 U.S.C. 103(a) as being unpatentable over Yoneyama ('132) in view of Hasebe ('494), Tom ('148) and Masghati ('961), as set forth in the last Office action, mailed 07/02/2003.

Claims 26-28 STAND rejected under 35 U.S.C. 102(e) as being anticipated by Yoneyama ('132), as set forth in the last Office action, mailed 07/02/2003.

RESPONSE TO ARGUMENTS

In the arguments received 12/02/2003, the applicant contends that none of the references cited in the last Office action teach increasing the moment of inertia of the club head about the horizontal axis. The applicant notes that the Hasebe, Tom and Masghati patents relied upon disclose contradictory teachings as to the optimization of the location of the center of gravity and the relative importance of the moment of inertia. The applicant vehemently argues that none of the cited prior art references shows or obviates a first moment of inertia about the horizontal axis greater than or equal to approximately 77 plus 0.46 times the head volume in cubic centimeters, as required by claims 1. Specific to the rejection of claims 26-28 using Yoneyama, the applicant contends that at 200 cubic centimeters, the Yoneyama patent discloses that the weight members added would comprise 9% of the total weight of the club head, which the applicant alleges is outside the claimed range of 10-40 percent, as required by claim 26. Last, the applicant submits a declaration by Todd P. Beach, which essentially attests that none of the cited prior art references shows or obviates a first moment of inertia about the horizontal axis greater than or equal to approximately 77 plus 0.46 times the head volume in cubic centimeters, as required by claims 1.

In response to these arguments and at the outset, it is noted that the prior art reference to Masghati is relied upon in its entirety in combination with Tom and Hasebe when discussing the modification of the Yoneyama reference. Any confusion experienced by the applicant as a result of the lack of a specific column/line reference in Masghati is sincerely regretted. It is noted, however, that the lack of any specific

mention to Masghati in the last Office action is not deemed to detract from the overall argument of the proposed combination.

In further response to the applicant's arguments, it is noted that the applicant has apparently deciphered each individual reference and has set forth a conclusion based on each reference regarding how the skilled artisan would have been guided to redistribute the weight of a golf club head in order to maximize the moment of inertia about a specific axis. It is well established that one cannot show nonobviousness by separately attacking the references, where in fact the rejection is based on a combination of references. See **In re Young et al**., 56 CCPA 757, 403 F.2d 754, 865 OG 320, 159 USPQ 725. The test for obviousness under 35 U.S.C. 103 is not the express suggestion of the claimed invention in any or all of the references. Rather, the test for obviousness is based upon what the references taken collectively would have reasonably suggested to one of ordinary skill in the art. See **In re Conrad**, 169 USPQ 170. Here, the primary reference to Yoneyama recognizes that a lower center of gravity will make it easier to hit the ball higher. In Yoneyama, the weights have been placed adjacent the plane and generally arranged in a front-to-rear direction, much like the applicant has proposed. True, Yoneyama does not recognize that maximizing this arrangement may have an effect on the horizontal moment of inertia. The teaching references, on the other hand, clearly appreciate that there is a distinct relationship between placement of the center of gravity and the moment of inertia. The significance of the teaching references to Hasebe and Tom has already been established in the last Office action and is incorporated herein by reference. Notwithstanding the lack of a

specific citation in the Masghati reference in the last Office action, it is noted that while the applicant has not incorrectly characterized the Masghati reference, it is important to recognize that Masghati generally teaches that optimizing the weight distribution of the head will help reduce rotation of the head about the vertical and horizontal axes. A very basic principle taught by Masghati is that concentrating weight towards the top or sole of the head may increase the moment of inertia about the horizontal axis. Armed with the fact that the prior art teaches that a hollow club head may include increased weight adjacent the sole, with the weight oriented in a front-to-rear direction such that the center of gravity is lowered and that this lowering of the center of gravity results in an increase in ball carry while the added concentration of weight at the sole increases the moment of inertia in the horizontal direction, the skilled artisan would have clearly found it obvious to modify the Yoneyama device to maximize the moment of inertia about the horizontal axis. Again, the applicant has not provided any evidence that the claimed parameters, i.e., a first moment of inertia about the horizontal axis greater than or equal to approximately 77 plus 0.46 times the head volume in cubic centimeters, as required by claims 1, are for any unobvious purpose.

Specific to the applicant's comments relating to the prior art rejection of claims 26-28 based upon the Yoneyama teaching, the applicant has simply provided a conclusion, not based on any facts. In other words, there is no evidence in the Yoneyama reference that a volume of greater than or equal to 200 cubic centimeters should include a total weight of the balance weights of 9% of the total weight of the head, as alleged by the applicant. There is no expressed linear relationship discussed

by Yoneyama between the volume of the head and the % weight of the balance members with respect to the total weight of the head. Rather, Yoneyama says that when the volume of the head is between 150 and 200 cubic centimeters, the total weight of the balance weights should be between 8 and 10% of the total weight of the head. This disclosure by Yoneyama clearly anticipates the applicant's claim language of claim 26.

As to the declaration submitted by Todd P. Beach, the comments therein have been considered, but are not deemed persuasive, as the declaration has not convincingly detailed that the claimed arrangement of the center of gravity provides any unobvious benefit over the prior art of record.

A marked-up copy of the drawings changes to Figure 4 has been received.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sebastiano Passaniti whose telephone number is 703-308-1006. The examiner can normally be reached on Mon-Fri (6:30-3:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Greg Vidovich can be reached on 703-308-1513. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

S. Passaniti

Sebastiano Passaniti
Primary Examiner
Art Unit 3711

S.Passaniti/sp
February 8, 2004